

### Sample Questions:

- 1) If 1 pound of sugar equals 4 cups, how many pounds of sugar are in 1 cup?
- 2) If 1 kilogram equals 2.2 pounds, how many kilograms does a 66 pound child weigh?
- 3) If 1 kilogram equals 2.2 pounds, how many pounds are in 1.5 kilograms?
- 4) If 1 centimeter equals  $\frac{3}{8}$  inch, how many centimeters are in  $2\frac{1}{2}$  inches?
- 5) A typical dose of Children's Tylenol contains 160 milligrams of Tylenol per teaspoonful. How many teaspoons of Tylenol would you need to give to give 40 milligrams?
- 6) One large apple contains 80 calories. How many calories do you consume if you eat  $\frac{3}{4}$  of an apple?
- 7) How many seconds are there in  $9\frac{1}{3}$  minutes?
- 8) A bottle of Children's Tylenol contains 20 teaspoons of liquid. If each dose for a 2-year old child is  $\frac{1}{2}$  teaspoon, how many doses are available in this bottle?
- 9) If 1 pound of apples costs \$0.69, how much do  $3\frac{1}{2}$  pounds cost?
- 10) If 1 centimeter equals  $\frac{3}{8}$  inch, how many centimeters are there in 3 inches?
- 11) If 1 kilogram (kg) equals 2.2 pounds (lbs), how many kg is 66 pounds?
- 12) A child who weighs 55 lbs is to receive 0.05 mg of a drug per kg of body weight. How much of the drug should the child receive for each dose?
- 13) An infant is taking a "ready-to-feed" formula. The formula comes in quart containers. If the infant usually takes 4 ounces of formula every 3 hours during the day and night, how many quarts of formula should the mother buy for a 3-day supply? (32 ounces in 1.0 quart)

$$C = (F - 32)/1.8$$

$$F = 1.8 C + 32$$

- 14) Zero degrees F equals how many degrees C?
- 15) One hundred degrees C equals how many degrees F?
- 16) 212 F equals how many degrees C?

### Sample Questions Continued:

17) 98.6 F equals how many degrees C ?

18) 32 C equals how many degrees F ?

19) Your doctor prescribes Ampicillin to you at 0.5 grams per day. The ampicillin is available in 250 mg per capsule. How many capsules, or part of a capsule, should you take a day?

20) Your doctor orders a penicillin lotion to be given at 100 mg. The label says that the lotion is 125 mg per 5 ml (milliliters). How much should you apply?

21) Your doctor orders potassium chloride at 40 mEq (milliequivalents) to be given. The label on the package says it comes in a solution of 20 mEq per 15 ml. How much should you give?

22) You are told to take 0.6 grams of Motrin. The pills come in 300 mg tablets. How many should you take?

23) You need to administer 20 mg per kg of a drug to a 20 pound child. The pills are 60 mg each. How many pills do you give her?

Cardiac Output (CO) equals Heart-Rate (HR) multiplied by Stroke-Volume (SV).

24) If your heart is beating at 72 beats per minute and your heart is ejecting 70 ml of blood per beat, what is your cardiac output?

25) What is a person's stroke volume if their cardiac output is 6.0 liters per minute and their heart is beating at 60 beats per minute?

The Mean Arterial Pressure (which is an indication of the average blood pressure) is

$$\text{MAP} = [2(\text{diastolic blood pressure}) + (\text{systolic blood pressure})] / 3$$

26) If your patient has a blood pressure of 120/80 (systolic/diastolic), what is her MAP?

The Pulse-Pressure is the difference between the systolic and diastolic blood pressures.

27) If you have a blood pressure of 120/80, what is your pulse pressure?